

U.S. Department of Commerce, Patent and Trademark Office					Atty Docket No.		Serial No.	
					M-9152-1D US		Unassigned	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT					Applicant(s)		10/07/01	
(Use several sheets if necessary)					Michael R. Krames et al.			
					Filing Date		Group	
					Unassigned 2-7-02		Unassigned	

1000 U.S. PRO 10/07/01 02/07/02

U.S. Patent Documents							
*Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate
[Signature]	AA	RE 36,747	06/27/00	Manabe et al.	257	431	
	AB	3,813,587	5/1974	Umeda et al.			
	AC	4,238,707	12/9/80	Malissin et al.	315	175	
	AD	4,329,625	5/11/82	Nishizawa et al.	315	158	
	AE	4,423,478	12/27/83	Bullock et al.	363	89	
	AF	4,983,884	1/8/91	Wychulis	315	151	
	AG	5,362,977	11/08/94	Hunt et al.	257	98	
	AH	5,408,120	04/18/95	Manabe et al.	257	431	
	AI	5,461,425	10/24/95	Fowler et al.	348	294	
	AJ	5,557,115	9/17/96	Shakuda	257	81	
[Signature]	AK	5,563,422	10/08/96	Nakamura et al.	257	13	

Foreign Patent Documents							Translation	
		Document	Date	Country	Class	Subclass	Yes	No
[Signature]	AL	0 529 1621	05-Nov-93	Japan			X	
	AM	0 550 963 A1	14-Jul-93	EPO			X	
	AN	0 772 249 A2	7-May-97	EPO			X	
	AO	0 772 249 A3	4-Nov-98	EPO			X	
	AP	0 921 577 A1	09-Jun-99	EPO			X	
[Signature]	AQ	0 926 744 A2	30 Jun. 1999	EPO			X	

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)		
[Signature]	AR	"Barrier Layer in the metallisation of Semiconductor Diode Lasers" Research Disclosure, Kenneth Mason Publications, Hampshire, 1994, no. 360, page 179, XP000446545, ISSN: 0374-4353
	AS	Evans et al., "Edge-Emitting Quantum Well Heterostructure Laser Diodes with Auxiliary Native-Oxide Vertical Cavity Confinement," <u>Applied Physics Letters</u> , 67(1995) 20 November, No. 21, pp. 3168-3170.
	AT	Han, H. et al.: "Electroplated Solder Joints for Optoelectronic Applications" <u>Electronic Components &amp; Technology</u> , 1996, pages 963-966, XP000646645

Examiner [Signature]	Date Considered 3-10-03
----------------------	-------------------------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with your communication to applicant.

U.S. Department of Commerce, Patent and Trademark Office					Atty Docket No.		Serial No.	
					M-9152-1D US		<del>Unassigned</del>	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT					Applicant(s)		10/01/01, 507	
(Use several sheets if necessary)					Michael R. Krames et al.			
					Filing Date		Group	
					<del>Unassigned</del> 2-7-02		<del>Unassigned</del> 2-8-02	
U.S. Patent Documents								
*Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate	
V	AU	5,862,167	01/19/99	Sassa et al.	372	45		
	AV	5,886,401	3/23/99	Liu	257	678		
	AW	5,914,501	6/22/99	Antle et al.	257	99		
	AX	6,016,038	1/18/00	Mueller et al.	315	291		
	AY	6,091,085	18 Jul. 2000	Lester	257	98		
H	AZ	6,121,127	09/19/00	Shibata et al.	438	604		
	BA	6,150,774	11/21/00	Mueller et al.	315	291		
Foreign Patent Documents								
							Translation	
		Document	Date	Country	Class	Subclass	Yes	No
H	BB	0 926 744 A3	31-May-00	EPO (Abstract)			X	
	BC	1 020 935 A2	19-Jul-00	Europe			X	
	BD	1 030 377 A2	23-Aug-00	EPO			X	
	BE	11 150 297	2-Jun-99	Japan			X	
	BF	11 191 641	13-Jul-99	Japan			X	
	BG	11 274568	8-Oct-99	Japan (Abstract)			X	
OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)								
H	BH	M. R. Krames et al., "High-power truncated-inverted-pyramid (Al <sub>x</sub> Ga <sub>1-x</sub> ) <sub>0.5</sub> In <sub>0.5</sub> P/GaP light-emitting diodes exhibiting >50% external quantum efficiency," Applied Physics Letter, Volume 75, Number 16, 18 October 1999.						
	BI	Roger Maxwell, "LED or Lamp Flasher: Minimum parts counting Designed for 3V battery operation", <a href="http://www.ee.washington.edu/circuit_archive/circuits">http://www.ee.washington.edu/circuit_archive/circuits</a>						
	BJ	Mensz, P.M. et al.: "In <sub>x</sub> Ga <sub>1-x</sub> N/Al <sub>y</sub> Ga <sub>1-y</sub> N violet light emitting diodes with reflective p-contacts for high single sided light extraction" Electronics Letters, GB, IEE Stevenage, vol. 33, no. 24, 20 November 1997, pages 2066-2068, XP000734311, ISSN: 0013-5194						
	BK	G. J. Sun and K. H. Chae, "Properties of 2,3-butanedione and 1-phenyl-1,2-propanedione As New Photosensitizers For Visible Light Cured Dental Resin Composites", Polymer, Vol. 41, pp. 6205-6212 (2000).						
	BL	Tan, Q. et al.: "Soldering technology for Optoelectronic Packaging" Electronic Components & Technology, 1996, pages 26-36, XP000646646						
Examiner		Date Considered			3-10-03			
*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with your communication to applicant.								

U.S. Department of Commerce, Patent and Trademark Office				Atty Docket No.		Serial No.	
				M-9152-1D US		Unassigned	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Applicant(s)		10/07/509	
(Use several sheets if necessary)				Michael R. Krames et al.			
				Filing Date		Group	
				Unassigned 2-7-02		Unassigned 2822	

U.S. Patent Documents							
*Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate
/	BM	/	/	/	/	/	/
/	BN	/	/	/	/	/	/
/	BO	/	/	/	/	/	/
/	BP	/	/	/	/	/	/
/	BQ	/	/	/	/	/	/
/	BR	/	/	/	/	/	/
/	BS	/	/	/	/	/	/
/	BT	/	/	/	/	/	/
/	BU	/	/	/	/	/	/
/	BV	/	/	/	/	/	/
/	BW	/	/	/	/	/	/

Foreign Patent Documents							Translation	
		Document	Date	Country	Class	Subclass	Yes	No
/	BX	19 921 987	18 Nov. 1999	Germany (Abstract)	/	/	X	/
/	BY	2 343 994	24 May 2000	United Kingdom	/	/	X	/
/	BZ	7 235 624	5-Sep-95	Japan (Abstract)	/	/	X	/
/	CA	/	/	/	/	/	/	/
/	CB	/	/	/	/	/	/	/

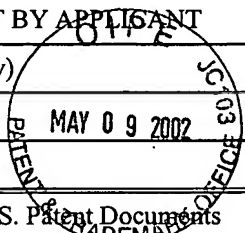
  

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)		
/	CC	/
/	CD	/
/	CE	/

Examiner	<i>[Signature]</i>	Date Considered	3-10-03
----------	--------------------	-----------------	---------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with your communication to applicant.

U.S. Department of Commerce, Patent and Trademark Office					Atty Docket No.		Serial No.	
					M-9152-3D US		10/071,507	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT					Applicant(s)			
(Use several sheets if necessary)					Krames, et al.			
					Filing Date		Group	
					February 7, 2002		unknown 2822	
U.S. Patent Documents								
*Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate	
MA	AA	5,410,159	4/25/95	Sugawara et al	257	13		
	AB	5,744,829	4/28/98	Murasato et al	257	94		
	AC	5,998,232	12/7/99	Maruska	438	46		
	AD	6,133,589	10/17/00	Krames et al	257	103		
	AE	6,081,540	6/27/00	Nakatsu	372	45		
	AF							
	AG							
	AH							
	AI							
	AJ							
	AK							
Foreign Patent Documents								
							Translation	
		Document	Date	Country	Class	Subclass	Yes	No
	AL	2301934	12/18/96	United Kingdom			x	
	AM	0702414 A2	3/20/96	Europe			x	
	AN	19756856A1	12/19/97	Germany				x
	AO							
	AP							
OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)								
	AQ	Sugawara, H. et al, "Emission Properties of InGaAlP, Visible Light-Emitting Diodes Employing a Multiquantum-Well Active Layer", Jpn. J. Appl. Phys., Vol. 33 (1994) Pt. 1, No. 10, October 1994, pp. 5784-5787						
	AR	Chang, S. J., et al, "AlGaInP multiquantum well light-emitting diodes", IEE Proc.-Optoelectron, Vol. 144, No. 6, December 1997, pp. 405-409						
	AS	Benisty, H., "Impact of Planar Microcavity Effects on Light Extraction-Part I: Basic Concepts and Analytical Trends", IEE Journal of Quantum Electronics, Vol. 34, No. 9, September 1998, pp. 1612-1631						
Examiner		Date Considered 3-10-03						
*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with your communication to applicant.								

U.S. Department of Commerce, Patent and Trademark Office					Atty Docket No.		Serial No.	
					M-9152-3D US		10/071,507	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT					Applicant(s)			
(Use several sheets if necessary)					Krames, et al.			
					Filing Date		Group	
					February 7, 2002		Unknown <i>283</i>	

U.S. Patent Documents							
*Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate
<i>[Signature]</i>	AA	6,169,294 B1	Jan. 2, 2001	Biing-Jye, et al.	257	79	
	AB						
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						
	AI						
	AJ						
	AK						

Foreign Patent Documents							Translation	
		Document	Date	Country	Class	Subclass	Yes	No
	AL							
	AM							
	AN							
	AO							
	AP							

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)							
	AQ						
	AR						
	AS						

Examiner <i>[Signature]</i>	Date Considered <i>3-10-02</i>
-----------------------------	--------------------------------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with your communication to applicant.